



**west virginia department of environmental protection**

Division of Air Quality  
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**ENGINEERING EVALUATION / FACT SHEET**

**BACKGROUND INFORMATION**

Application No.: R13-19531  
Plant ID No.: 107-00004 <sup>182</sup>  
Applicant: The Chemours Company FC, LLC  
Facility Name: Washington Works  
Location: Washington, Wood County  
NAICS Code: 325211, 325120, and 325222  
Application Type: Modification  
Received Date: May 21, 2015  
Engineer Assigned: Mike Egnor  
Fee Amount: \$300  
Date Received: June 3, 2015  
Complete Date: June 12, 2015  
Due Date: August 4, 2015  
Applicant Ad Date: June 5, 2015  
Newspaper: *The Parkersburg News and Sentinel*  
UTM's: Easting: 442.3767 km Northing: 4346.8331 km Zone: 17  
Description: Emission Unit ID's C2EQ and C2KQ and Control Device C2EQC have been removed from the Permit. References to R13-2617 have been changed to R13-3223. The 45 day requirement between opacity readings in Section 4 has been removed to create consistency throughout the facility.

**DESCRIPTION OF PROCESS**

The C2 Area manufactures fluoropolymer resins by pre-charging fluoromonomers into reactors along with demineralized water. Aqueous solutions of catalyst salts are then pumped into the reactors to initiate polymerization. Additional fluoromonomers are fed into the reactors as the reaction proceeds. Unreacted fluoromonomers are vented to recycling facilities at the end of the reaction. The remaining fluoropolymer and water slurry is pumped to agglomerators that mechanically separate the fluoropolymer from the water. Alternatively, the reactor output may be sent to facilities which concentrate the dispersion to higher solids and package the dispersion for sale. From the agglomerators, the polymer is conveyed to devices where water and other low boiling compounds are removed prior to extrusion. The polymer is then converted to pellets via an extrusion process. The

pellets are hot air sparged to remove additional traces of miscellaneous volatile fluorocarbons, elutriated to remove traces of polymer fines and packaged for distribution.

The changes submitted in this application include:

1. Remove Emission Unit IDs C2EQ and C2KQ from condition 1.0, which lists Emission Units. C2EQ is now covered as a source under application R13-2365F. C2KQ no longer emits a regulated air pollutant, but such pollutants are covered by source C2EC which exhausts to emission point C2DAE; no increase in emissions is needed or requested.
2. Revise condition 2.4.2. to say: *"this permit supercedes and replaces previously issued Permit R13-1953H."*
3. Include within condition 2.5.1. a reference to Permit Application R13-1953I.
4. Remove references to Source ID C2EQ and Emission Point ID C2EQE from Tables 4.1.1., 4.1.2. and 4.1.3., as these are now covered under permit application R13-2365F.
5. Remove references to Emission Point ID C2EQE from permit conditions 4.1.11., 4.1.12. and 4.1.14.
6. Replace reference to Air Quality permit R13-2617 in permit condition 4.1.21. of the permit with a reference to Air Quality permit R13-3223, which supersedes R13-2617 for The Chemours Company.
7. See comment in Regulatory Discussion section above regarding changes to conditions 4.2.2. and 4.2.3.
8. Remove Control Device ID C2EQC and corresponding information from Table 4.2.4. on page 18 of the permit.
9. Remove the several references to Source ID C2EQ, Control Device ID C2EQC and Emission Point ID C2EQE from the Tables in Attachments A through D in Appendix A of the permit.
10. Changed the Permittee Name and Facility ID number from "E. I. Du Pont Nemours and Company" and "10700001" to "The Chemours Company FC, LLC" and "10700182" respectively.

**Equipment List:**

The following changes are being requested in this modification.

**Table 1: Changes to the equipment table**

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Type of Change</b>
C2EQ	C2EQE	Removal
C2KQ	Area	Removal

**SITE INSPECTION**

Chemours Washington Works facility is well known by the WV DAQ. The Fluoropolymers area of the plant had their last on site inspection conducted on August 28, 2012. At the time of the inspection, the Fluoropolymers area was found to be in compliance. No site inspection is required for this Class II Administrative Update permit application.

**ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER**

**Summary:**

Since Emission Unit ID C2EQ has been transferred to R13-2365F there is no change in emissions from this source at the facility. Emission Unit ID C2KQ no longer emits a regulated air pollutant. The change in emissions covered by this permit modification are provided in Table 2.

**Table 2: Net Emission Changes for C2KQ**

<b>Regulated Pollutant</b>	<b>Emission Limit R13-1953H</b>		<b>Emission Limit R13-1953I</b>		<b>Emissions Change</b>	
	<b>lb/hr</b>	<b>tpy</b>	<b>lb/hr</b>	<b>tpy</b>	<b>lb/hr</b>	<b>tpy</b>
VOC	5.50	1.51	0.0	0.0	- 5.50	- 1.51

**REGULATORY APPLICABILITY**

**STATE REGULATIONS**

The following regulations apply to this production unit: West Virginia Regulations 4, 7, 13, 21, 29, 30 and US EPA MACT Standards for the Miscellaneous Organic NESHP.

## RACT

45CSR21-40.3.c requires RACT analysis on a case by case basis for those VOC emissions greater than 6 pph which are constructed, modified, or begin operation after the date 45CSR 21 becomes effective. Permit R13-3223 requires RACT analysis for any increase in VOC from sources listed in R13-3223. No increase in VOCs or other air pollutant emissions are being requested within this application.

This class II permit amendment application is being filed under 45CSR13 for the following reasons:

### **45 CSR 7 – Compliance condition modification request – Condition 4.2.2.:**

In the current permit the requirement for monitoring for particulate matter, found in permit condition 4.2.2. which requires *“For emission points C2DKE, C2EGE, and C2EUE monitoring shall be conducted at last once per month with a maximum of forty-five (45) days between consecutive readings”*. Chemours has experienced a significant issue with the interpretation of the condition such that we consistently perform the observations as required. The additional text that sets the 45 day maximum interval has been seen, despite educational efforts, to mean that there is up to a 45 day period after the last reading to take the next reading. Chemours is requesting that the compliance condition be simplified to require a monthly visual observation for visible particulate emissions. The elimination of the perceived conflicting 45 day period will enable Chemours personnel to ensure the readings are performed at the correct interval and that focus can be given to the Operations personnel to ensure the reading is always taken early in the operational month before production schedule or challenges alter the operational timing and cause a missed reading. The suggested limited text change from above is to *“For emission points C2DKE, C2EGE, and C2EUE monitoring shall be conducted at least once per month.”*

Condition 4.2.3. currently also makes references to the 45-day maximum time period between visible emission monitoring. We propose removing the last two sentences of the condition, and simply replacing them with the following language: *“Equipment listed in Table 4.2.3. shall be monitored monthly as required in condition 4.2.2. or during the next available operating period – whichever comes first.”*

Additionally, other Reg.13 and Title V language requests are being made to clean up both permits with the submission of the Title V permit renewal application for R30-10700182.

## PSD

As of January 2, 2011, pursuant to actions taken by the USEPA, Greenhouse Gases (GHGs) became a regulated pollutant under the major NSR program. As such, an evaluation must be done for any increase in GHG emissions resulting from construction or modification to determine PSD applicability per 40 CFR 52.21. There are no new emissions of components listed in table A-1 of 40 CFR 98.2 therefore PSD for GHG does not apply.

## 45CSR30 REQUIREMENTS FOR OPERATING PERMITS

The process area associated with this permit application operates under Title V permit R30-10700001-2010, Part 2 of 14. The applicant submitted a joint application that includes a minor modification to their Title V permit.

## FEDERAL REGULATIONS

There are no new federal regulations as a result of this permit application.

## TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

There are no new regulated air pollutants as a result of this modification.

## AIR QUALITY IMPACT ANALYSIS

The proposed project does not meet the definition of a major modification according to the definitions in 45CSR14 and 45CSR19; therefore, modeling is not required for this permit application.

## MONITORING OF OPERATIONS

The 45 day requirement between opacity readings in Conditions 4.2.2 and 4.2.3 have been removed to create consistency throughout the facility. These units shall still be monitored at least once per month or during the next available operating session - whichever comes first.

## CHANGES TO PERMIT R13-1953H

Miscellaneous updates were made to the title page, headers, etc. to reflect current administration and current permit revision.

1. Emission Units C2EQ and C2KQ as well as Control Device C2EQE have been removed from the Permit.
2. A reference to R13-1953I has been added to Condition 2.5.1.
3. A reference to R13-2617 has been changed to R13-3223 in Condition 4.1.21.
4. The 45 day requirement between opacity readings in Conditions 4.2.2 and 4.2.3 have been removed to create consistency throughout the facility. These units shall still be monitored at least once per month.
5. Changed the Permittee Name and Facility ID number from "E. I. Du Pont

Nemours and Company" and "10700001" to "The Chemours Company FC, LLC" and "10700182" respectively.

RECOMMENDATION TO DIRECTOR

The writer recommends that the Modification Permit R13-1953I be granted to Chemours, Washington Works facility located in Wood County, WV. Based on the information provided in the permit application, the applicant meets all applicable federal and state air regulations pertaining to the requested change.



Mike Egnor  
Permit Engineer



Date